### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In Re Application of:

Benn Bollay

Serial No.

10/040,773

Group Art Unit: 2619

Filed:

12/28/2001

Examiner: Gregory B. Sefcheck

For:

CONTENT FILTERING USING STATIC SOURCE ROUTES

Mail Stop Appeal Brief - Patents Commissioner for Patents P. O. Box 1450 Alexandria, VA 22313-1450

#### **BRIEF ON APPEAL**

Sir:

The following Appeal Brief is submitted in response to the Notice of Appeal dated January 11, 2008.

#### I. Real Party in Interest

The real party in interest in this matter is The DIRECTV Group, Inc. of El Segundo, California which is 34 percent owned by Fox Entertainment Group, which is approximately 82 percent owned by The News Corporation, Limited.

#### II. Related Appeals and Interferences

There are no other known appeals or interferences which will directly affect or be directly affected by or have bearing on the Board's decision in the pending appeal.

#### III. Status of the Claims

Claims 1-25 stand rejected in the Final Office Action and are appealed herein.

#### IV. Status of Amendments

There have been no Amendments filed after the Advisory Action.

#### V. Summary of Claimed Subject Matter

The present system is generally shown in Figure 2. The filtering routers are shown in Figure 4 and methods for operating the present system are illustrated in Figures 7A and 7B.

Claim 1 is directed to a method for filtering content. A filtering router shown in Figure 4 is used. The method steps are illustrated in Figure 7B and will be described below. Claim 1 recites receiving at a content filtering router a packet containing a request for content, where said packet comprises a first destination internet protocol (IP) address of a content server that stores the content and a second destination IP address of the content filtering router. The corresponding step is Step 734, which is described on page 13, lines 1-4.

Claim 1 further recites determining whether the first destination IP address is on a list of destination IP addresses to be filtered. This is illustrated in Figure 7B as Step 736 and is described on page 14, lines 10-12.

Claim 1 also recites routing the packet to an output port on the content filtering router based on the first destination IP address and the list. This is illustrated as Step 744 and is described on page 14, lines 15-16.

Claim 2 depends from claim 1 and recites that determining comprises ascertaining that the first IP address is on the list, and wherein said routing comprises directing said

packet someplace other than said first destination IP address. This is described on page 11, lines 26-28.

Claim 3 depends from claim 1 and recites that determining comprises ascertaining through which output port the packet should be forwarded based on the first destination IP address and a routing table stored on the content filtering router. The routing table is illustrated as reference numeral 418 in Figure 4 and the router is illustrated in various places, including in Figure 4 as 210, 212 and 214. This step is described on page 11, line 20 through page 12, line 2.

Claim 4 depends from claim 3 and recites that ascertaining utilizes a routing protocol 416 to determine the output port. This is described on page 11, line 10.

Claim 5 depends from claim 4 and recites that the routing protocol is a border-gateway protocol. This is described on page 11, line 11.

Claim 6 depends from claim 3 and recites that the routing table 418 is a border-gateway protocol table. This is also described on page 11, line 11.

Claim 7 depends from claim 2 and recites that directing comprises sending the packet to an additional content filtering router, where said packet comprises a third destination IP address of the additional content filtering router. This is described on page 10, lines 21-28 and page 16, line 9. Various numbers of filtering routers are illustrated in Figure 2. Two filtering routers are also illustrated in the process of Figure 8B as 210 and 212.

Claim 8 depends from claim 2 and recites that directing comprises sending the packet to a service provider, such that the service provider can notify a user who made the request that the content has been blocked. This is described on page 15, lines 12-15.

Claim 9 depends from claim 1 and recites that before receiving, accepting the first destination IP address and an associated output port on the content filtering router. This is described as Step 706. Claim 9 also recites storing the first destination IP address and the associated output port in the list on the content filtering router. This is described in Step 712. These steps are described on page 12, line 14.

Claim 10 depends from claim 8 and recites that storing comprises saving the first destination IP address and the associated output port in a routing table on the content filtering router. This is described on page 12, line 11-13.

Claim 11 depends from claim 1 and recites that determining comprises ascertaining that the first IP address is not on the list. This is described on page 16, lines 1-4.

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Claim 12 depends from claim 11 and recites the further step of removing the second destination IP address from the packet. This is illustrated as Step 742 of Figure 7B and is described on page 14, line 12.

Claim 13 depends from claim 11 and recites that routing comprises directing the packet toward the first destination IP address. This is described on page 16, lines 1-4.

Claim 14 is a second independent claim and describes a method for filtering content. Claim 14 recites the step of receiving at an internet protocol (IP) communication device a packet containing a request for content, where said packet comprises a source IP address of a client computer from where the request originated and a first destination IP address of a content server that stores the content. This is illustrated in Figure 7B as Step 734 and described on page 13, lines 1-4.

Claim 14 further recites determining that the request is to be subjected to a content filtering service, based on the first destination IP address. This is set forth on page 15, lines 10-12 and is illustrated as Step 736 in Figure 7B.

Claim 14 additionally recites adding a second destination IP address of a content filtering router to the packet. This is described on page 14, lines 3-6. Claim 14 also recites sending the packet toward the content filtering router. This is described on page 14, lines 4-5.

Claim 15 depends from claim 14 and recites that prior to adding, determining to how many content filtering levels the request is to be subjected. This is described on page 13, lines 6-10.

Claim 16 depends from claim 15 and recites that adding further comprises adding an additional destination IP address to the packet for each of the content filtering levels. This is described on page 13, lines 14-17.

Claim 17 depends from claim 14 and recites the further steps of receiving the content from the content server, when the first destination IP address was not on a routing table on the content filtering router, and sending the content to the source IP address. This is described on page 6, lines 1-4.

Claim 18 depends from claim 14 and recites the further steps of before receiving, acquiring the source IP address and an indicator of whether the content filtering service is to applied to the source IP address, and storing the source IP address and the indicator. This is described on page 10, lines 10-18.

Claim 19 depends from claim 18 and recites that acquiring comprises obtaining a filtering level associated with the source IP address. This is described on page 10, lines 15-18.

Claim 20 depends from claim 14 and recites that before receiving, acquiring a list of filtering levels and associated second destination IP addresses, where each filtering level is associated with a different second destination IP address from a different content filtering router and storing the list of filtering levels and associated second destination IP addresses. This is described on page 10, lines 10-18.

Claim 21 is an independent claim directed to a content filtering router. As mentioned above, the content filtering router is generally illustrated in Figure 4. Claim 21 recites a central processing unit (CPU) 402, communications circuitry 404, input ports 406 (1) - 430 (N), a memory 410 containing an operating system 412, and communication procedures 414. The communication procedures are configured to receive a packet containing a request for content, where said packet comprises a first destination internet protocol (IP) address of a content server that stores the content and a second destination IP address of the content filtering router. Claim 21 also recites a routing protocol 416. The above components are all described on page 10, line 30 through page 11, line 6.

The routing protocol 416 includes instructions for determining whether the first destination IP address is on a list of destination IP addresses to be filtered. This is described on page 14, lines 10-12.

Claim 21 further recites that the routing protocol includes instructions for routing the packet to one of the output ports based on the first destination IP address and the list. This is described on page 14, lines 15-16. Claim 21 also recites that the routing protocol includes a routing table 418 containing the list. The routing table is described on page 11, line 11.

Claim 22 is an independent claim directed to a bidirectional internet protocol (IP) communication device. The device is set forth as reference numeral 204 in Figure 3. The bidirectional IP communication device includes a central processing unit (CPU) 302,

communications circuitry 304, input and output ports 306 (1) - 306 (N), and memory 310 that includes a operating system 312 and communications procedures 314. These elements are described on page 9, lines 17-32.

The communication procedures include instructions for receiving a packet containing a request for content where the packet comprises a source IP address of a client computer from where the request originated and a first destination IP address of the content server that stores the content, and instructions for sending the packet toward a content filtering router. This is described on page 13, lines 1-4 and page 14, lines 4-5.

Claim 22 also recites filtering procedures 316, illustrated in Figure 3, that include instructions for determining that the request is to be subjected to a content filtering service, based on the first destination IP address. This is described on page 14, lines 10-12.

Claim 22 further recites instructions for adding a second destination IP address of the content filtering router to the packet before it is send toward the content filtering router. This is described on page 14, lines 3-6.

Claim 23 is an independent claim directed to a computer readable storage medium having stored thereon a plurality of computer-executable instructions. The instructions include instructions for receiving at an internet protocol (IP) communication device a packet containing a request for content where the packet comprises a source IP address of a client computer from where the request originated and a final destination IP address of a content server that stores the content. This is described on page 13, lines 1-4. The computer program product further includes instructions for determining that the request is to be subjected to a content filtering service, based on the first destination IP address. This is described on page 14, lines 10-12.

Claim 23 further recites instructions for adding a second destination IP address of a content filtering router to the packet before it is sent toward the content filtering router. This is described on page 14, lines 3-6.

Claim 24 is an independent claim that is directed to a system for content filtering comprising an internet protocol (IP) communication device 204 coupled between at least one client computer 202 and at least one filtering router 210. The client computer and the filtering router are illustrated in Figure 2 and described on page 18, lines 18-25. Claim 24 further recites that the IP communication device 204 is configured to route requests for

content received from the at least one client computer toward at least one filtering router, and where the at least one filtering router is configured to route the request for contents someplace other than a content server that stores the content when the content server's IP address is on a list of addresses to be filtered, wherein the list is a routing table stored on the content filtering router. These steps are described on page 14, lines 10-12 and page 16, lines 1-4.

Claim 25 depends from claim 24 and recites that the at least one filtering router is configured to route the request for content to the content server when the content server's IP address is not on the list of addresses to be filtered. This is described on page 16, lines 1-4.

#### VI. Grounds of Rejection to be reviewed on Appeal

The following issues are presented in this appeal:

Whether the objection to the specification for containing hyperlinks is proper.

Whether claims 1-4, 7-10, 14-16 and 18-24 are unpatentable under 35 U.S.C. § 102(e) as being anticipated by Mayer (US 7016980 B1).

Whether claims 11-13, 17 and 25 are unpatentable under 35 U.S.C. §103(a) over Mayer (US 7016980 B1).

Whether claims 5 and 6 are unpatentable under 35 U.S.C. §103(a) over Mayer (US 7016980 B1) in view of Shah (US 6260070 B1).

#### VII. Argument

#### The Objection to the Specification

The Examiner objects to the disclosure because page 1, lines 1-14, of the Specification includes embedded hyperlinks. The Examiner states that, "Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code." However, Appellant notes that page 1 of the Description of the Related Art does not include hyperlinks. These sections merely set forth an example of an Internet address. More specifically, the third sentence of the Description of the Related Art states, "This content is typically located through Internet addresses, such as HTTP://www.company.com/info/.

These passages are not hyperlinks, but rather examples of Internet addresses. There is no browser executable code associated with this.

In response to the above argument, the Examiner again cites MPEP 608.01 that states that hyperlinks and other forms of browser-executable code are not to be included in the patent application. However, Appellant maintains that the HTTP address set forth is merely an example of an address and not of browser-executable code. Therefore, Appellant respectfully requests the Board to reverse the Examiner's objection.

# The Rejection of Claims 1-4, 7-10, 14-16 and 18-24 under 35 U.S.C. § 102(e) as being anticipated by Mayer (US 7016980 B1) Claim 1

Claim 1 is directed to a method for filtering content. A filtering router shown in Figure 4 is used. The method steps are illustrated in Figure 7B and will be described below. Claim 1 recites receiving at a content filtering router a packet containing a request for content, where said packet comprises a first destination internet protocol (IP) address of a content server that stores the content and a second destination IP address of the content filtering router. The corresponding step is Step 734, which is described on page 13, lines 1-4.

Claim 1 further recites determining whether the first destination IP address is on a list of destination IP addresses to be filtered. This is illustrated in Figure 7B as Step 736 and is described on page 14, lines 10-12.

Claim 1 also recites routing the packet to an output port on the content filtering router based on the first destination IP address and the list. This is illustrated as Step 744 and is described on page 14, lines 15-16.

The first step of claim 1 is receiving at a **content filtering router**. The last clause is routing the packet to an output port on said content filtering router based on the first destination IP address and the list.

For a proper Section 102 rejection, each and every one of the claim limitations must be found in the reference. The Mayer reference does not teach each and every one of the elements. In fact, Appellant respectfully submits that more than one of the elements is not found.

The Examiner points to column 8, lines 48-53 for meeting the limitations of claims 1, 14, 21, 22 and 23. This passage states, "A central object in the firewall analysis tool 200 is a query. A query is a triple, consisting of a source host-group, a destination host-group and a service [host-]group. The semantics of such a query are 'which IP address is within the source host-group can send services from the service host-group to which IP addresses in the destination host-group?"

The Appellant respectfully directs the Examiner to the Abstract of the Mayer reference which gives the purpose of the Mayer reference. While it is true, as the Examiner points out, that the title is apparatus for analyzing one or more firewalls, Appellant respectfully submits that the Mayer reference is substantially different. The Abstract specifically recites that the Mayer reference is directed to a method and apparatus for analyzing the operation of one or more network gateways, such as firewalls or routers that perform a packet filtering function in a network environment. The Appellant respectfully points out that this first sentence highlights the packet filtering aspect of the Mayer reference. Further, the Abstract states, "Given a user query, the disclosed firewall analysis tool simulates the behavior of the various firewalls, taking into account the topology of the

network environment, and determines which portions of the services are machine-specified in the original query would manage to reach from the source to the destination." Therefore, the purpose is for a simulation for firewalls.

As was highlighted above, claim 1 is directed to a content filtering router. The Mayer reference does not teach or suggest the use of a content filtering router. Filtering is mentioned but both Figure 1, reference numeral 125, and Figure 2, reference numeral 155 recite "packet filtering." Because claim 1 is directed to a method for filtering content as recited in the preamble, the packet comprises a first destination IP protocol address of a content server that stores content of the content filtering router. There is no teaching or suggestion for a content server and a content filtering router in the Mayer reference.

The second element of claim 1 is also not taught or suggested in the Mayer reference.

That is, determining whether the first IP address is on a list of destination IP addresses to be filtered, is also not taught or suggested in the Mayer reference.

Element 3 is also not taught in the Mayer reference. That is, routing the packet to an output port on the content filtering router based upon the destination IP address and the list, is not taught. As mentioned above, the content filtering router is not present in the Mayer reference. Therefore, because several differences exist and each and every element of claim 1 is not taught in the Mayer reference, Appellant respectfully requests the Examiner to reconsider this rejection.

#### Claim 2

Claim 2 defines the step of determining as ascertaining that the first IP address is on the list and that the step of routing comprises directing said packet someplace other than said first destination IP address. The Examiner points to column 5, lines 45-47. Appellant has

reviewed this section and find that it describes passing or dropping of packets in response to the address being on a list. Therefore, Appellant respectfully requests the Board to reverse the Examiner's position with respect to claim 2.

#### Claim 3

Claim 3 depends from claim 1 and recites that the determining step comprises ascertaining through which output port said package should be forwarded based on the destination IP address and a routing table stored on the content filtering router. On page 3 of the final office action, the Examiner points to column 6, lines 25-40. However, there is no teaching of a routing table on the content filtering router and through which output port the packet should be forwarded based on the first IP address. Merely a "route scheme" is set forth in line 34. Therefore, Appellant respectfully requests the Board to reverse the Examiner's position with respect to claim 3.

#### Claim 4

Claim 4 depends from claim 3 and recites routing protocol that determines the output port. For the same reason set forth above with respect to claim 3, claim 4 is also believed to be allowable.

#### Claim 7

Claim 7 recites that directing the packet someplace other than the first destination IP address comprises sending the packet to an additional content filter router wherein the packet comprises a third destination IP address of the additional content filter router. The Examiner points to column 10, lines 27-37. These passages merely refer to the specifics of the firewall analysis tool. There is no teaching of an additional content filtering router and a third destination IP address of the additional content filtering router.

Therefore, Appellant respectfully requests the Board to reverse the Examiner's position with respect to claim 7 as well.

#### Claim 8

Claim 8 recites that directing comprises sending the packet to a service provider, such that the service provider can notify the user who made the request that the content has been blocked. The Examiner points to column 5, lines 45-47. Although passing or dropping packets is described, there is no teaching for sending the packet to the service provider such that the service provider can notify a user who made the request that the content has been blocked.

Therefore, Appellant respectfully requests the Board to reverse the Examiner's position with respect to claim 8 as well.

#### Claim 9

Claim 9 recites that before the step of receiving accepting the first destination IP address and an associated output port on the content filtering router, and storing the first destination IP address and the associated output port in the list on the content filtering router. The Examiner points to column 5, lines 38-43 and column 6, lines 5-10 for this teaching. Again, the firewall analysis tool is described in these passages. There is no description of output ports, or the like, or storing output ports on a list.

Appellant, therefore, respectfully requests the Board to reverse the Examiner's position with respect to claim 9.

#### Claim 10

Claim 10 recites saving the first destination IP address and the associated output port and the routing table on the content router. As mentioned above, no teaching or suggestion is

provided for a routing table in the Mayer reference. Therefore, Appellant respectfully requests that the Board reverse the Examiner's position with respect to claim 10.

#### Claims 14 and 23

Claim 14 is directed to a method for filtering content. Claim 14 recites receiving at an Internet protocol communications device a packet containing a request for content where the packet comprises a source IP address of a client computer from where the request originated and a destination IP address of a content server that stores content. Claim 14 further recites determining that the request is to be subjected to a content filtering service based on the destination IP address and adding a second destination IP address of a content filtering router to the packet. Claim 14 then recites that the further step of sending the packet toward the content filtering router. Claim 14 thus is also directed to filtering content. Claim 14 also recites a content filtering router which the Appellant believes is not taught in the Mayer reference as described above with respect to claim 1. There is no distinction in the Mayer reference for determining that a request is to be subjected to a content filtering service based on the destination IP address and adding a second destination IP address of a content filtering router to the packet. As mentioned above, the Mayer reference is merely directed to simulation. Appellant believes that each and every element of claim 14 is also not taught in the Mayer reference and, therefore, respectfully requests the Board to reverse the Examiner's rejection of claim 14.

#### Claim 23

Claim 23 is an independent claim that is directed to a computer program. The claim is very similar to that of claim 14 and, therefore, Appellant respectfully requests the Board to reverse the Examiner's rejection of claim 14 as well.

#### Claim 15

Claim 15 depends from claim 14 and recites prior to adding, determining to how many content filtering levels said request is to be subjected. The Examiner points to col. 10, lines 27-38. However, Appellant can find no teaching or suggestion for determining to how many content filtering levels the request is subjected. Appellant, therefore, respectfully requests the Board to reverse the Examiner's position with respect to claim 15.

#### Claim 16

Claim 16 depends from claim 15 and recites adding an additional destination IP address to the packet for each of the content filtering levels. Again, there is no teaching or suggestion for adding destination IP addresses to the packet. Appellant, therefore, respectfully requests the Board to reverse the Examiner's position with respect to claim 16 as well.

#### Claim 18

Claim 18 recites the further steps of before receiving, acquiring the source IP address and an indicator of whether the content filtering service is to be applied to the source IP address and storing the source IP address and the indicator. The Examiner points to col. 10 lines 14-26. However, there is no teaching or suggestion in this passage for this. Appellant, therefore, respectfully requests the Board to reverse the Examiner's position with respect to claim 18.

#### Claim 19

Claim 19 depends from claim 18 and recites obtaining a filtering level associated with the source IP address. The Examiner merely points to the same passage set forth in the

rejection of claim 18. Therefore, Appellant respectfully requests the Board to reverse the Examiner's position with respect to claim 19 as well.

#### Claim 20

Claim 20 recites the steps of acquiring a list of filtering level and associated second destination IP addresses where each filtering level is associated with a different second destination IP address of a different content filtering router, and storing the list of filtering levels and associated second destination IP addresses. The Examiner points to col. 10, lines 23-26 for this teaching. This passage merely refers to a gateway-zone graph and not storing the list of filtering levels and associated second destination IP addresses. Appellant, therefore, respectfully requests the Board to reverse the Examiner's position with respect to claim 20.

#### Claim 21

Claim 21 is similar to claim 1 in that communication procedures are set forth that are configured to receive a packet that also includes a first destination IP address and a second destination IP address. A routing protocol is set forth having several instructions for determining whether the first IP address is on a list, instructions for routing the packet to one of the output ports based on the first destination IP address on the list, and a routing table containing the list. This claim is similar to claim 1 and, therefore, is believed to be allowable for at least the same reasons as set forth above.

In response to the above arguments, the Examiner disagrees. The Examiner, on page 8 of the Final Office Action, states, "The Mayer reference has been applied to the pending claims based upon disclosure of routers that perform packet filtering based upon destination IP addresses, where a packet is regarded as 'content' to be filtered, meeting the limitations

regarding 'content filtering,' as claimed." Again, the Examiner seems to be confusing content filtering and packet filtering. Claims 1, 14 and 21 are directed to content filtering. For example, the first element of claim 1 recites, "Receiving at a content filtering router a packet containing a request for content ...". While it is true that a router is described in column 3, line 15, of the Mayer reference, the Mayer reference is merely concerned with analyzing the operation of one or more firewalls. The Mayer reference is merely for performing a simulation.

The Examiner then states, "As shown in the rejections, Mayer's disclosure of filtering packets (content) based upon comparing the destination IP address with gateway-zone graph 300 (routing table) meets the explicit limitations of the pending claims. Appellant notes that the gateway-zone graph 300 is described in column 10, lines 33-45. From this paragraph, it is clear that the gateway-zone graph 300 models the effect of the rule-base that is attached to the interface on the packets described by the query. The gateway-zone graph 300, therefore, does not teach or suggest a list of IP addresses to be filtered as set forth in the second element of claim 1. Therefore, Appellant respectfully requests the Examiner to reconsider the above-mentioned rejections.

#### Claim 22

Claim 22 is directed to a bi-directional Internet Protocol communications device that has similar limitations to those of claim 14 in that their instructions are for performing most of the steps of claim 14. As mentioned above with respect to claim 14, Mayer reference does not teach or suggest these elements. Appellant, therefore, respectfully requests the Board to reverse the Examiner's rejection of claim 22 as well.

#### Claim 24

Independent claim 24 is directed to a system for content filtering comprising an Internet Protocol communications device coupled between at least one client computer and at least one filtering router. The IP communications device is configured to route requests for content received from the at least one client computer toward the at least one filtering router and where the at least one filtering router is configured to route the request for content someplace other than a content server that stores the content when the content server's IP address is upon a list of addresses to be filtered. The list is a routing table stored on the content filtering router.

The Examiner points to column 6, lines 25-40 for teaching a routing table. Again, although a gateway-zone graph is taught, there is no teaching or suggestion for a routing table. The gateway-zone graph merely refers to the operation of the firewall analysis tool 200.

The Examiner also points to column 10, lines 27-38 for the teachings of claim 24. The gateway-zone graph is again mentioned in this passage. As mentioned above, this refers merely to the operation of the firewall algorithm. There is no teaching or suggestion in these passages for at least one filtering router being configured to route the request for content some place other than a content server that stores the content when the content server's IP address is on a list of addresses to be filtered and where the list is a routing table stored on the content filtering router. As mentioned above, there is no teaching or suggestion for a content filtering router as well.

Appellant, therefore, respectfully requests the Board to reverse the Examiner's rejection of claim 24.

### The rejection of claims 11-13, 17 and 25 under 35 U.S.C. §103(a) over Mayer (US 7016980 B1)

#### Claim 11

Claim 11 depends from claim 1 and recites that ascertaining the first destination IP address is not on the list. The Examiner merely states that, "In the disclosure of Mayer, if a query is not restricted in the filtering files of any gateway, it will be allowed to pass unrestricted." However, there is no teaching or suggestion for an IP address being on a list.

Therefore, Appellant respectfully requests the Board to reverse the Examiner's position with respect to claim 11.

#### Claim 12

Claim 12 recites removing the second destination IP address from the packet in addition to the recitations described above in claim 11. The Examiner merely states that it would have been obvious to one of ordinary skill in the art at the time of the invention to implement the method and apparatus of Mayer by routing content request to the content server and receiving the content without forwarding the request to any routers when the IP destination is not included on the addresses to be filtered. However, there is no teaching or suggestion for a list let alone removing a second IP address from the packet. Appellant respectfully requests the Board to reverse the Examiner's position, since this step is not taught or suggested in the Mayer reference.

#### Claim 13

Claim 13 recites directing the packet towards the first destination IP address. These limitations in combination with claim 11 and claim 1 are not taught or suggested in the references. The same logic used by the Examiner in the rejection of claims 11 and 12 is used

here. Therefore, Appellant respectfully requests the Board to reverse the Examiner's position with respect to claim 13.

#### Claim 17

Claim 17 depends from claim 14 and recites receiving the content from the content server when the first destination IP address was not on a routing table on the content filtering router, and sending the content to the source IP address. The Examiner merely uses the same logic as claims 11-13 for these steps. However, there is no teaching or suggestion in the Mayer reference for these steps. Appellant, therefore, respectfully requests the Board to reverse the Examiner's rejection.

#### Claim 25

Claim 25 depends from claim 24 and recites that at least one filtering router is further configured to route the request for the content server when the content server's IP address is not on the list of addresses to be filtered. As mentioned above with respect to claim 11, this element is not taught in Mayer. Therefore, Appellant respectfully requests the Board to reverse the Examiner's position with respect to claim 25 as well.

## The rejection of Claims 5 and 6 under 35 U.S.C. §103(a) over Mayer (US 7016980 B1) in view of Shah (US 6260070 B1)

#### Claim 5

Claim 5 depends from claim 4 and recites that the routing protocol is a border-gateway protocol. The Examiner cites the Shah reference for a border gateway protocol. While Appellant agrees that a border gateway protocol is illustrated, there is no teaching or suggestion for the combination set forth in claims 4, 2 and 1. Further, the Shah reference is directed to a preferred mirrored service in a network by evaluation a border gateway protocol. Thus, there is no teaching or suggestion for using the border gateway protocol in a

method for filtering content. Therefore, Appellant respectfully requests the Board to reverse the Examiner's position with respect to claim 5.

#### Claim 6

Claim 6 depends from claim 3 and recites the routing tables of a border-gateway protocol table. As mentioned above with respect to claim 5, there is no teaching or suggestion for forming the combination of the Shah and the Mayer references. The Shah reference does teach a border gateway protocol table but does not teach the other limitations missing from claims 3 and 1. Therefore, Appellant respectfully requests the Board to reverse the Examiner's position with respect to this claim as well.

#### VIII. Claims Appendix

A copy of each of the claims involved in this appeal, namely claims 1-25, is attached as an Appendix.

#### IX. Evidence Appendix

None.

#### X. Related Proceedings Appendix

None.

#### XI. Conclusion

For the foregoing reasons, Appellant respectfully requests that the Board direct the Examiner in charge of this examination to withdraw the rejections.

Please charge any fees required in the filing of this appeal to Deposit Account 08-0750.

Respectfully submitted,

Dated:\_\_\_\_\_ January 11, 2008

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#### **CLAIMS APPENDIX**

1. A method for filtering content, comprising:

receiving at a content filtering router a packet containing a request for content, where said packet comprises a first destination Internet Protocol (IP) address of a content server that stores said content and a second destination IP address of said content filtering router;

determining whether said first destination IP address is on a list of destination IP addresses to be filtered; and

routing said packet to an output port on said content filtering router based on said first destination IP address and said list.

- 2. The method of claim 1, wherein said determining comprises ascertaining that said first IP address is on said list, and wherein said routing comprises directing said packet someplace other than said first destination IP address.
- 3. The method of claim 1, wherein said determining step comprises ascertaining through which output port said packet should be forwarded based on said first destination IP address and a routing table stored on said content filtering router.
- 4. The method of claim 3, wherein said ascertaining utilizes a routing protocol to determine said output port.
- 5. The method of claim 4, wherein said routing protocol is a Border Gateway Protocol (BGP).

- 6. The method of claim 3, wherein said routing table is a Border Gateway Protocol (BGP) table.
- 7. The method of claim 2, wherein said directing comprises sending said packet to an additional content filtering router, where said packet comprises a third destination IP address of said additional content filtering router.
- 8. The method of claim 2, wherein said directing comprises sending said packet to a service provider, such that said service provider can notify a user who made said request that said content has been blocked.
  - 9. The method of claim 1, further comprising, before said receiving,

accepting said first destination IP address and an associated output port on said content filtering router; and

storing said first destination IP address and said associated output port in said list on said content filtering router.

- 10. The method of claim 8, wherein said storing comprises saving said first destination IP address and said associated output port in a routing table on said content filtering router.
- 11. The method of claim 1, wherein said determining comprises ascertaining that said first IP address is not on said list.

- 12. The method of claim 11, further comprising removing said second destination IP address from said packet.
- 13. The method of claim 11, wherein said routing comprises directing said packet toward said first destination IP address.
  - 14. A method for filtering content, comprising:

receiving at an Internet Protocol (IP) communications device a packet containing a request for content where said packet comprises a source IP address of a client computer from where the request originated and a first destination IP address of a content server that stores said content;

determining that said request is to be subjected to a content filtering service, based on said destination IP address;

adding a second destination IP address of a content filtering router to said packet; and sending said packet toward said content filtering router.

- 15. The method of claim 14, further comprising, prior to said adding, determining how many content filtering levels said request is to be subjected to.
- 16. The method of claim 15, wherein said adding further comprises adding an additional destination IP address to said packet for each of said content filtering levels.

17. The method of claim 14, further comprising:

receiving said content from said content server, when said first destination IP address was not on a routing table on said content filtering router; and

sending said content to said source IP address.

18. The method of claim 14, further comprising, before said receiving, acquiring said source IP address and an indicator of whether said content filtering service is to be applied to said source IP address;

storing said source IP address and said indicator.

- 19. The method of claim 18, wherein said acquiring further comprises obtaining a filtering level associated with said source IP address.
- 20. The method of claim 14, further comprising, before said receiving, acquiring a list of filtering levels and associated second destination IP addresses, where each filtering level is associated with a different second destination IP address of a different content filtering router;

storing said list of filtering levels and associated second destination IP addresses.

21. A content filtering router, comprising:

a Central Processing Unit (CPU);

communications circuitry;

input ports;

output ports; and

a memory containing:

an operating system;

communication procedures configured to receive a packet containing a request for content, where said packet comprises a first destination Internet Protocol (IP) address of a content server that stores said content and a second destination IP address of said content filtering router;

a routing protocol comprising:

instructions for determining whether said first destination IP address is on a list of destination IP addresses to be filtered;

instructions for routing said packet to one of said output ports based on said first destination IP address and said list; and

a routing table containing said list.

22. A bidirectional Internet Protocol (IP) communications device, comprising:

a Central Processing Unit (CPU);

communications circuitry; and

input/output ports; and a memory containing:

an operating system;

communication procedures comprising:

instructions for receiving a packet containing a request for content where said packet comprises an source IP address of a client computer from where the request originated and a first destination IP address of a content server that stores said content; and

instructions for sending said packet toward a content filtering router;

filtering procedures comprising:

instructions for determining that said request is to be subjected to a content filtering service, based on said destination IP address; and

instructions for adding a second destination IP address of said content filtering router to said packet before it is sent toward said content filtering router.

23. A computer readable storage medium having stored thereon a plurality of computer-executable instructions comprising:

instructions for receiving at an Internet Protocol (IP) communications device a packet containing a request for content where said packet comprises an source IP address of a client computer from where the request originated and a first destination IP address of a content server that stores said content;

instructions for determining that said request is to be subjected to a content filtering service, based on said destination IP address;

instructions for adding a second destination IP address of a content filtering router to said packet; and

instructions for sending said packet toward said content filtering router.

24. A system for content filtering, comprising an Internet Protocol (IP) communications device coupled between at least one client computer and at least one filtering router, where said IP communications device is configured to route requests for content received from said at least one client computer toward said at least one filtering

router, and where said at least one filtering router is configured to route said requests for content someplace other than a content server that stores said content when said content server's IP address is on a list of addresses to be filtered, where said list is a routing table stored on said content filtering router.

25. The system of claim 24, wherein said at least one filtering router is further configured to route said requests for content to said content server when said content server's IP address is not on said list of addresses to be filtered.

IX. Evidence Appendix

None.

447.50

### X. Related Proceedings Appendix

None.